



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,785	03/08/2004	Leslie R. Fine	200401144-1	4138

7590 10/20/2009
HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

JARRETT, SCOTT L

ART UNIT	PAPER NUMBER
----------	--------------

3624

MAIL DATE	DELIVERY MODE
-----------	---------------

10/20/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/797,785	Applicant(s) FINE ET AL.	
	Examiner SCOTT L. JARRETT	Art Unit 3624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This **Final** rejection is in response to Applicant's arguments filed August 21, 2009. No claims have been amended or canceled. Currently claims 1 and 3-24 are pending.

Response to Arguments

2. Applicant's arguments filed August 21, 2009 have been fully considered but they are not persuasive.

In response to applicant's argument that there is no suggestion to combine the references, the examiner respectfully disagrees. An obviousness determination is not the result of a rigid formula disassociated from the consideration of the facts of a case. Indeed, the common sense of those skilled in the art demonstrates why some combinations would have been obvious where others would not. See *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. ___ (2007) ("The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.").

In response to applicant's Applicant(s) attempt at traversing the Official Notice findings as stated in the previous Office Action (Remarks Page 9) is inadequate and untimely.

Adequate traversal is a two step process. First, Applicant(s) must state their traversal on the record. Second and in accordance with 37 C.F.R. 1.111(b) which requires Applicant(s) to specifically point out the supposed errors in the Office Action, Applicant(s) must state why the Official Notice statement(s) are not to be considered common knowledge or well known in the art.

In this application, while Applicant(s) have clearly met step (1), Applicant(s) have failed step (2) since they have failed to argue why the Official Notice statement(s) are not to be considered common knowledge or well known in the art. Because Applicant(s)' traversal is inadequate, the Official Notice statement(s) are taken to be admitted as prior art. See MPEP 2144.03.

Further it is noted that applicant's attempt to traverse the officially cited facts raised in the previous office action(s) is untimely. Specifically in the Non-Final Office Action mailed May 21, 2009 (Page 8) the examiner noted that the following officially cited facts were unchallenged and therefore prior art.

Specifically it has been established that it was old and well known in the art at the time of the invention:

- to providing probabilities associated with a specified outcome;
- that exponential factoring is an old and well know mathematical/statistical technique, method and/or approach wherein common exponential factoring in forecasts include exponential weighted averaging, exponential smoothing factors, MACD (exponential) and the like.

In response to Applicant's arguments that the various references teach away from one another (Remarks: Paragraph 1, Page 9; Last Paragraph, Page 15; Paragraphs 1-2, Page 16), the examiner respectfully disagrees.

Specifically applicants argue that Kaplan teaches not utilizing experts while Sarin requires experts. Initially it is noted that the claims only call for the creation of an information market having a plurality of **participants**, the phrase experts is nowhere recited in the claims.

Accordingly in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the phrase expert is nowhere recited in the currently pending claims) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Further it is noted that applicant's specification provides no definition for the phrase expert and as such the phrase would be given its common and custom meaning, broadest reasonable interpretation in light of the specification. In the instant application the term expert, if recited, would be interpreted to mean any one or more of the following definitions adept, having or showing knowledge and skill and aptitude; relating to or requiring special knowledge to be understood; having a skill; a person with special knowledge or ability who performs skillfully, specialist, a person with special knowledge in an area.

All the applied references clearly show the participation of a plurality of **participants** in the market/forecasting efforts.

In response to Applicant's arguments that Kaplan teaches away from "information that is privately held by individuals" and that that Kaplan teaches away from using past/historical information and information privately held by individuals as is taught by Plott-MIG (Remarks: Paragraph 3, Page 33; (Paragraph 2, Page 16), the examiner respectfully disagrees.

It is noted that the features upon which applicant relies (i.e., information that is privately held by individuals are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view

Art Unit: 3624

of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3-6, 8-14 and 17-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaplan, U.S. Patent No. 7,155,510 in view of Sarin, Rakesh K. An Approach for Long Term Forecasting with an Application to Solar Electric Energy (1979).

Regarding Claims 1, 10, 19 and 22 Kaplan teaches a method and system for forecasting comprising:

- creating an (information, decision, prediction, matching, betting, trading, wagering, speculative, virtual, idea, event derivatives, etc.) market to determine the participant characteristic (Column 6, Lines 5-12, 40-68; Column 7, Lines 1-25; Column 8, Lines 9-15, 43-60; Column 10, Lines 12-34; Column 11, Lines 22-26);
- determining at least one participant characteristic of a participant based on the participants behavior within the market (e.g. WPSE; Column 4, Lines 49-52; Column 5, Lines 32-40; Column 6, Lines 64-68; Column 7, Lines 1-26; Column 8, Lines 9-14);
- defining predictions each corresponding to a probability associated with an expected outcome (Column 6, Lines 40-55);

- performing a query process with the probability as assets (information, securities, financial instruments, etc.; Column 4, Lines 30-68; Column 5, Lines 1-8; Column 6, Lines 5-24; Column 9, Lines 5-12);
- aggregating a result of the query process with weighting for the participant characteristic (WPSE, CPI; Column 6, Lines 5-12, 40-68; Column 7, Lines 1-25; Column 8, Lines 9-15, 43-60; Column 10, Lines 12-34; Column 11, Lines 22-26).

While providing probabilities forecasts for various possible/expected outcomes, e.g. probability bins, buckets, classes, ranges of expected outcomes, rain/no rain) is old and very well known (see for example: Plott et al., Information Aggregation Mechanisms: Concept, Design, and Implementation For A Sales Forecasting Problem (2002): Paragraphs 3-4, Page 6; Paragraphs 2-3, Page 7; Plott, Markets as Information Gathering Tools (2000): Section 3, Pages 12-13; "Since these prices must range from 0-100, they can be interpreted as probabilities. Thus, the price of 9 in the market SEP-LOW-1500 can be interpreted as the "market belief" that the probability is 0.09 that the September sales will be in the range of 0-1500. With the interpretation of prices as probabilities, the model state is 1901-2100 with a probability of 0.22..." Paragraph 1, Page 13).

While Kaplan teaches defining a plurality of expected outcomes and associating probability with each Kaplan does not expressly use the phrase "probability bins" as claimed (see range of potential definitions recited in Applications specification: Paragraphs 55, 58; Figure 6).

Sarin teaches defining probability bins each corresponding to a probability associated with an expected outcome (scenarios, probability distributions; Abstract; Paragraphs 1-2, Page 546; Paragraph 1, Page 547; Last Paragraph, Page 550) in an analogous art of forecasting for the purpose of predicting/forecasting alternative projections/scenarios (Paragraph 2, Page 544; Paragraph 1, Page 553).

Sarin further teaches a system and method for forecasting comprising: performing a query process with the probability bins and aggregating a result of the query process with weighting for individual participant characteristic(s) (Section 8, Pages 551-552).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for forecasting as taught by Kaplan would have benefited from defining probability bins having an associated probability in view of the teachings of Sarin; the resultant system/method enabling users to forecast alternative scenarios/outcomes (Sarin: Paragraph 2, Page 544).

Further since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Art Unit: 3624

Regarding Claims 9, 11, 20 and 23 Kaplan teaches method and system further comprising conducting an market (information, decision, prediction, matching, betting, trading, wagering, speculative, virtual, idea, event derivatives, etc.) to determine the participant characteristic (Column 6, Lines 5-12, 40-68; Column 7, Lines 1-25; Column 8, Lines 9-15, 43-60; Column 10, Lines 12-34; Column 11, Lines 22-26).

Regarding Claims 3-4, 13, 18 and 21 Kaplan teaches a forecasting system and method further comprising determining the mean, average and other common statistical/mathematical parameters associated with the forecasts/probabilities associated with the expected outcomes (Column 56, Lines 4—53; Column 11, Lines 22-30).

Kaplan does not expressly teach probability bins as claimed.

Sarin teaches defining a center probability bin and defining the probability bins with increasing variances from the center probability bin outward and providing a mean estimate as the center probability bin (Paragraphs 1-2, Page 550; Paragraph 2, Page 552; Table 7) in an analogous art of forecasting for the purpose of predicting/forecasting alternative projections/scenarios (Paragraph 2, Page 544; Paragraph 1, Page 553).

Art Unit: 3624

It would have been obvious to one skilled in the art at the time of the invention that the system and method for forecasting as taught by Kaplan would have benefited from defining probability bins having probabilities associated with expected outcomes as well as defining a center probability bin in view of the teachings of Sarin, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Regarding Claims 5 and 14 Kaplan teaches a method and system wherein the further comprising historical (true, actual, measured, factual, etc.) data associated with the forecasts (probabilities associated with expected outcomes; Column 4, lines 50-53; Column 9, lines 26-34; Column 11, Lines 15-17) for the purpose of comparing participant's forecasted data with actual/true historical data related to the expected outcome.

Kaplan does not expressly teach subdividing data (forecasts, predictions, expected outcomes, etc.) into probability bins as claimed.

Sarin teaches subdividing forecasts/data into probability bins (scenarios, probability distributions; Abstract; Paragraphs 1-2, Page 546; Paragraph 1, Page 547; Last Paragraph, Page 550) in an analogous art of forecasting for the purpose of

Art Unit: 3624

predicting/forecasting alternative projections/scenarios (Paragraph 2, Page 544; Paragraph 1, Page 553).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for forecasting as taught by Kaplan would have benefited from defining probability bins (subdividing predictions/forecasts) in view of the teachings of Sarin; the resultant system/method enabling users to forecast alternative scenarios/outcomes (Sarin: Paragraph 2, Page 544).

Further since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Regarding Claims 8 and 17 Kaplan teaches a method and system wherein the weighting includes individual participant prediction for the participant and the query process as a whole (Column 7, Lines 1-25; Column 8, Lines 9-15, 43-60; Column 10, Lines 12-34; Column 11, Lines 22-26).

While Kaplan teaches that any of a plurality of none weighting schemes could be used (Column 14, Lines 56-60) Kaplan does not expressly teach utilizing exponential factoring for the participant characteristic and the query process as a whole as claimed.

Art Unit: 3624

Official notice is taken that exponential factoring is an old and well know mathematical/statistical technique, method and/or approach. Common exponential factoring in forecasts include exponential weighted averaging, exponential smoothing factors, MACD (exponential) and the like.

It would have been obvious to one skilled in the art at the time of the invention that the system and method for forecasting as taught by the combination of Kaplan and Sarin would have benefited from utilizing any of a plurality of weighting factors including but not limited to exponential smoothing in view of the teachings of official notice; since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

5. Claims 6-7 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaplan, U.S. Patent No. 7,155,510 in view of Sarin, Rakesh K. An Approach for Long Term Forecasting with an Application to Solar Electric Energy (1979) as applied to claims 1-6, 8-14 and 17-23 above, and further in view of Pennock et al., The Power of Play (2001).

Regarding Claims 6-7 and 15-16 Kaplan teaches providing an web-based software application to facilitate forecasting (Column 5, Lines 25-40)

Kaplan does not expressly teach wagering by participants on an expected outcome as claimed.

Pennock et al. teach a method and system further comprising wagering (betting) by the participant on the expected outcome as well as facilitating participant wagering by providing a web-based software application (HSX, FSX; Paragraphs 2-3, Last Paragraph, Page 5; Last Paragraph 3, Paragraph 1, Page 4; Last Paragraph, Page 16; Paragraph 1, Page 17) in an analogous art of forecasting.

It would have been obvious to one skilled in the art at the time of the invention that the forecasting system and method as taught by Kaplan would have benefited from enabling participants to wager/bet on expected outcomes in view of the teachings of

Art Unit: 3624

Pennock et al. since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Art Unit: 3624

6. Claim is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaplan, U.S. Patent No. 7,155,510 in view of Sarin, Rakesh K. An Approach for Long Term Forecasting with an Application to Solar Electric Energy (1979) as applied to claims 1, 3-6, 8-14 and 17-23 above and further in view of Lundgren, U.S. Patent No. 5,608,620.

Regarding Claim 24, Sarin teaches determining and accounting for the accuracy of participant's input (forecasts; Column 7, Lines 9-26; Column 8, Lines 9-41) however Sarin does not expressly teach providing rewards to participants as claimed.

Lundgren teaches a system and method further comprising: providing a reward (incentive, compensation, payment, bonus, return, etc.) to the participant based on an accuracy of the result of the query process as compared to a corresponding actual asset (Column 1, Lines 64-68; Column 2, Lines 1-22; Column 6, Lines 26-37; Column 20, Lines 9-16; Column 24) in an analogous art of forecasting.

It would have been obvious to one skilled in the art at the time of the invention that the system and method for finance forecasting as taught by the combination of Sarin and Kaplan would have benefited from providing rewards/incentives to participants based on the accuracy of their results in view of the teachings of Lundgren, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did

Art Unit: 3624

separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SCOTT L. JARRETT whose telephone number is (571)272-7033. The examiner can normally be reached on Monday-Friday, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bradley Bayat can be reached on (571) 272-6704. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3624

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Scott L Jarrett/
Primary Examiner, Art Unit 3624